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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,390	05/31/2001	Daniel A. Maude	CAO-0090	9880

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EXAMINER

EVANISKO, LESLIE J

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,390

Applicant(s)

MAUDE ET AL.

Examiner

Leslie J. Evanisko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 12-20, 22-24, 27 and 29-37 is/are rejected.
- 7) ☒ Claim(s) 21, 25, 26 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/04/01 & 02/26/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 1-11 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 7.

Drawings

2. The corrected or substitute drawings were received on February 26, 2003. These drawings, as well as the original drawing sheets filed 09/04/2001 are approved by the Examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any

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inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 12-15, 17-20, 22-24, 27, and 29-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley (US 5,655,453) in view of Merritt (Des. 349,571). Ackley teaches a process of applying a pattern to an object with a curved surface (such as a pellet or other cylindrical shaped object) including the steps of providing the object, orienting the object relative to a printing device, and printing a pattern on the object using the printing device. See, in particular, Figures 2 and 15 and columns 8-12. Although Ackley does not necessarily teach the object printed upon is an earplug, note Merritt teaches an ear protector having an indicia provided thereon is well known in the art. See, in particular, the Figure of Merritt. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide the printing process of Ackley to be used to print indicia upon a surface of any similar shaped object, such as an earplug or ear protector, to provide printed indicia upon earplugs to function as an advertisement or cheering aid.

With respect to claims 13-15 and 33-34, note Ackley teaches the use of a non-contact printing device (i.e., ink jet printhead) and an impact printing device in column 9, lines 57-66 and column 12, lines 29-48.

Furthermore, with respect to claim 17, although Ackley does not specifically state that the pattern formed is a dot matrix pattern, note that it is well known in the art that inkjet printing devices can be used to form dot matrix patterns. Therefore, there is no unobviousness in using the inkjet printer of Ackley to form a dot matrix pattern of the desired indicia.

With respect to claims 18-20 and 36-37, note the teaching in column 6, lines 27-30 and column 8, lines 34-39 of Ackley. Furthermore, note that Merritt shows a number indicia on the ear plug is well known in the art.

With respect to claims 22-23, note the object of Ackley is oriented by an alignment device **10, 12, 25** for positioning the object within or near the printing device and since the alignment device functions to move the objects throughout the printing process, it can broadly be considered to selectively position the object in "a plurality of orientations" as broadly recited by applicant.

With respect to claim 24, since the printing device of Ackley includes a pair of printheads, it can broadly be considered to apply a pattern to the object from "a plurality of positions" as recited.

With respect to claims 27 and 29, again note that Ackley in view of Merritt render obvious the process as recited. Note, in particular, the above

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comments with respect to claims 12-26 and that Ackley teaches communicating a pattern from a storage device to the printing device using a controller in column 9, line 57-column 10, line 14.

With respect to claims 30-32, note that Ackley teaches the use of inkjet printers including at least one nozzle for ejecting ink. Although Ackley is silent with respect to the particular details of the inkjet printer structure, note that inkjet printers including ejection of ink from nozzles with vibration as well as inkjet printers using charge electrodes to deflect the ink are well known in the art. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide any known inkjet printer structure of the inkjet device of Ackley as modified by Merritt, as it would simply require the obvious substitution of one known inkjet printhead arrangement for another to provide better printing of the indicia upon the article.

With respect to claim 35, note that Ackley teaches applying a pattern to the side surface of a cylindrical object is well known in the art.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ackley in view of Merritt as applied to claims 12-15, 18-20, and 22 above, and further in view of Roulleau (US 5,142,976). Ackley in view of Merritt teach a process as recited with the exception of the particular type of contact printing device. Roulleau teaches that the use of an impact printing device such as a pad printing device for printing upon curved surfaces is well known in the art.

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See columns 1-2 and Figure 1 of Roulleau in particular. In view of this teaching, it would have been obvious to one of ordinary skill in the art to provide a pad printing device as taught by Roulleau in the printer of Ackley as modified by Merritt, as it would simply require the obvious substitution of one known impact printing device for another.

Allowable Subject Matter

7. Claims 38-39 are allowed.

8. Claims 21, 25-26, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 38-39, the prior art of record fails to teach or fairly suggest a process for providing a pattern on an earplug having all of the method steps as recited, in combination with and particularly including, the earplug having two end surfaces and a side surface, and printing a first pattern on the side surface of the ear plug and printing a second pattern on one of the end surfaces of the earplug.

With respect to claim 21, the prior art of record fails to teach or fairly suggest a printing process having all the method steps as recited, in combination with and particularly including, having a plurality of printing devices for printing a plurality of patterns on the earplug, the printing devices being oriented one of 120°, 180°, and 90° relative to one another.

With respect to claims 25-26, the prior art of record fails to teach or fairly suggest a printing process having all the method steps as recited, in combination with and particularly including, the printing device including at least one nozzle, the nozzle applying the pattern to the earplug from a plurality of orientations as recited.

With respect to claim 28, the prior art of record fails to teach or fairly suggest a printing process having all of the method steps as recited, in combination with and particularly including, the step of orienting the printing device relative to the earplug using the controller.

Response to Arguments

10. Applicant's arguments filed December 19, 2003 have been fully considered but they are not persuasive of any error in the above rejections.

In response to applicant's argument that Ackley fails to teach or suggest impact printing techniques as recited in claim 15 and is limited to nonimpact printing only, the Examiner disagrees and directs applicant's attention to column 12, lines 29-48 and Figures 15-17 of Ackley, which clearly states that

the pellet shaped articles can be printed using the more traditional contact-type printing procedures.

Additionally, applicants argue that the pellet shaped food and pharmaceutical items of Ackley are typically “hard, non-resilient, non-compressible, often hollow objects filled with solid, granular, or liquidous materials” and therefore are not similar to earplugs, which are typically compressibly resilient items. Again, the Examiner disagrees with this argument. First, the claims as currently written do not necessarily require the earplugs to be “resilient” or “compressible”. Additionally, Merriam Webster’s Collegiate Dictionary (Tenth Edition) defines a capsule as “a shell usually of gelatin for packaging something (as a drug or vitamin).” It is the Examiner position that a capsule made of gelatin (or, according to applicant’s definition, a hollow object filled with liquid material) is broadly resilient and compressible to some extent and therefore similar in material composition/behavior to a resilient body such as an earplug.

Applicant also argues that Merritt does not specifically teach an earplug since the patent only discloses a “combination ear protector and cheering aid” and according to applicant, the terms “cheering aid” and “ear protector” are vague and unclear in meaning and therefore Merritt fails to teach an earplug as recited. Again, the Examiner disagrees with this argument. It is the Examiner’s position that one of ordinary skill in the art would easily recognize the item of Merritt to be an earplug with indicia provided on it which functions

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to reflect the user's favorite athletes (i.e., player numbers in football, basketball, etc. or driver number such as in NASCAR race cars) or other items. Clearly, persons attending sporting events in large stadiums/race tracks would be subjected to noise levels which would encourage them to protect their ears/hearing with earplugs.

Furthermore, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, although Merritt merely shows an ear protector with indicia provided thereon and is silent with respect to whether the indicia is printed, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art to use a printing arrangement to print the indicia upon the ear protector, since printing is a well known way of applying indicia to articles. Furthermore, Ackley teach printing arrangements for printing relatively small and resilient objects having curved surfaces. Therefore, it would have been obvious to one of ordinary skill in the art to use the printing process taught by Ackley to print indicia upon an

earplug (i.e., a relatively small article with a curved surface) to provide an earplug with printed indicia that functions as a cheering aid.

In view of this reasoning, the above rejections are deemed appropriate by the Examiner.

Response to Amendment

11. The declaration under 37 CFR 1.132 filed December 19, 2003 is insufficient to overcome the rejections of claims 12-20, 22-24, and 27-37 based upon 35 USC 103 as set forth in the last Office action because:

It refer(s) only to the system described in the above referenced application and not to the individual claims of the application. Thus, there is no showing that the objective evidence of nonobviousness is commensurate in scope with the claims. See MPEP § 716. In particular, applicants have failed to establish a nexus between the claimed invention and the evidence of commercial success. Specifically, in the declaration, applicants merely state that they “believe” the product “EARSof Blast” are formed according to the process of the invention described and claimed in the application and that they further believe that the product “EARSof Neons” are not formed by the process of the invention. Applicants further state that EARSof Blast have experienced commercial success. These broad statements provided in the declaration do not provide evidence commensurate in scope with the claims. Note that MPEP 716.03(b) states that a declaration stating that commercial success attributed

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to a product or process “constructed according to the disclosure and claims of the patent application” or other similar language does **not** establish a nexus between the claimed invention and commercial success because there is no evidence that the product or process which has been sold corresponds to the claimed invention, or that whatever commercial success may have occurred is attributable to the product or process defined by the claims.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Conclusion


12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Simmet (US 5,671,667) teaches a printer for printing upon a resilient cylindrical object having obvious similarities to the claimed subject matter.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Leslie J. Evanisko** whose telephone number is **(571) 272-2161**. The examiner can normally be reached on M-Th 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Leslie J. Evanisko
Primary Examiner
Art Unit 2854

lje
April 5, 2004